Final Notes March 3, 1999

IMPLEMENTATION TEAM MEETING NOTES

February 4, 1999, 9:00 a.m.-4 p.m.

NATIONAL MARINE FISHERIES SERVICE OFFICES
PORTLAND, OREGON

I. Greetings and Introductions.

The February 4, 1999 meeting of the Implementation Team, held at the National Marine Fisheries Service's offices in Portland, Oregon, was chaired by Brian Brown of NMFS and facilitated by Donna Silverberg. The agenda for the February 4 meeting and a list of attendees are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced in the body of the text may be too lengthy to attach; all enclosures referenced are available upon request from NMFS's Kathy Ceballos at 503/230-5420 or via email at kathy.ceballos@noaa.gov.

II. Introductions and Review of Agenda.

Brown welcomed everyone to the meeting, led a round of introductions and a review of the agenda.

III. Updates.

a. In-Season Management. TMT Chair Cindy Henriksen briefed the IT on the January final water supply forecast, which shows expected runoff volumes of 116 MAF, or110% of normal, at The Dalles (Jan.-July), 68.7 MAF, or 109% of normal, at Grand Coulee (Jan.-July) and 23.8 MAF, or 110% of normal, at Lower Granite (April-July). The February final forecast is not yet available, Henriksen said, but the February early-bird forecast shows an upward trend, with water supplies in the 112%-115% of normal range at many projects.

Henriksen said the Corps has run analyses of the anticipated runoff volumes at each of the projects in the system, shaped according to the 60-year historic water record. With that analysis, she said, we were able to get a bit of a feel for the likelihood of meeting the BiOp flow objectives in 1999. At McNary, given the magnitude of the water supply forecast, the spring flow objective would be 260 Kcfs; the summer objective would be 200 Kcfs. At Lower Granite, the spring flow objective would be 100 Kcfs; the summer objective, 53.2 Kcfs. Based on the monthly time-step model run using the 60-year record, Henriksen said, it appears likely that we can meet the seasonal flow objectives at Lower Granite and McNary, as well as the spring flow objective at Priest Rapids. She added that the Corps will do another round of modeling once the

February final water supply forecast is available.

Henriksen said the TMT has been busy finalizing its Guidelines for 1999; she distributed a final draft of this document (Enclosure C), which she said should be approved at next Wednesday's TMT meeting. The only remaining issue of substance on the Guidelines is the fact that we need written confirmation from each of the participating entities of their official representatives and alternates, she said; this is primarily an administrative detail, but it's something that needs to be resolved.

The TMT is also working on its Water Management Plan for 1999, Henriksen continued; the main change from the 1998 plan is the fact that the 1999 WMP will be written for a TMT, rather than a general, audience, and will be considerably streamlined – much of the repetitive information in the 1998 plan will be eliminated.

EPA's Mary Lou Soscia said that, at the recent Water Temperature Workshop in Portland, it was agreed to work through the TMT to develop a plan and protocols to address future water temperature problems at McNary Dam, to avoid or minimize the type of water temperature problems that occurred in 1998. I haven't followed up on that yet, Soscia said, but I wanted to give you a heads-up that I'm still interested in working on that problem with TMT.

b. Plan for Analyzing and Testing Hypotheses (PATH). The PATH update was presented under Item IV of today's agenda.

c. Integrated Scientific Advisory Board (ISAB). The ISAB report was presented under Item V of today's agenda.

d. Dissolved Gas Team (DGT). DGT Chair Mark Schneider reported that the DGT met on January 15; one of the items discussed was the future of the DGT, given the fact that the group has largely completed the work outlined for it within the Biological Opinion. The DGT will continue to have annual duties, such as the review of spill management plans and assisting NMFS in developing waiver requests and monitoring plans, but in general, much of this work will focus on dissolved gas as a water quality issue. It has been suggested, therefore, that the DGT merge with Mary Lou Soscia's Temperature Assessment Team to form a Water Quality Team, Schneider said.

Schneider described a possible scope of work for this combined Water Quality Team, which he said could include the following items:

Completion and interpretation of the Columbia River Basin Water Temperature Model
Development of a systemwide Dissolved Gas Model
Coordination of the Team efforts with those of the Transboundary Gas group
Coordination of the Team efforts with those of the state and tribal water quality efforts
Water quality standards attainment
Framing, development and discussion of water quality policy issues
Review of the annual Spill Management Plan
Review of the annual Water Management Plan
Review of the annual Gas Bubble Trauma Monitoring Plan
Review of the annual Dissolved Gas Monitoring Plan
Monitoring, review and comment on gas abatement plans and projects (Fasttrack) in the

Basin
Technical assistance associated with the annual state dissolved gas water quality standards waivers (other water quality waivers?)
Other items (?)

Schneider described this list of potential tasks as a work in progress; he said the proposed merger of the two water quality groups will be discussed further at the February 23 meeting of the Temperature Assessment Team. The next DGT meeting is scheduled for March 9; at that meeting, Schneider said he hopes to resume the merger discussion, adding that he will provide an update on the potential merger at the March IT meeting.

Jim Ruff of the Council staff endorsed the proposed merger, saying that, in his opinion, it presents a rare opportunity to streamline the Regional Forum process; it also makes sense to combine the two efforts into a regional water quality group addressing both dissolved gas and water temperature. One of the key provisions of the Northwest Power Act says that we will provide flows of adequate quantity and quality for anadromous and resident fish, said Ruff; to the
Council, this approach makes a lot of sense. I would echo those comments, from the NMFS perspective, Brown said.

Schneider asked that any comments on the proposed merger, or on the proposed scope of work for the combined group, be submitted to him or to Mary Lou Soscia.

e. System Configuration Team (SCT). SCT co-Chair Bill Hevlin said that, at its last meeting on January 22, the group addressed issues raised from the Portland District FFDRWG about spill and studies at The Dalles, John Day and Bonneville for 1999 and beyond. At The Dalles, Hevlin explained, the questions focused on what the past two years of survival and FPE studies tell us, and how that information pertains to what facilities and operations need to be studied in 1999 and beyond.

The SCT spent a few minutes discussing these issues, but came to the conclusion that they needed to formulate a plan to address them effectively, Hevlin continued. The first element of that plan is a technical meeting, set for February 11; Hevlin distributed Enclosure D, a packet containing the agenda for that meeting as well as a variety of background information on recent study results, recommended research for 1999 and beyond, comments on the testing from the Fish Passage Center and CRITFC, as well as additional background on the proposed 1999 spill test and program at John Day Dam. Interested TMT and IT members are also invited to attend the February 11 meeting, Hevlin said.

At the meeting, the various entities who have developed papers on the issue of The Dalles spill test will have an opportunity to present and discuss their ideas, Hevlin continued. At the end of that discussion, our hope is to summarize these technical statements, and identify areas of agreement and disagreement, for presentation back to SCT on February 17. At the SCT meeting on February 17, we will discuss what we learned at the February 11 meeting, and either frame a recommendation for TMT and IT consideration, or frame the issue or issues for IT resolution.

At the February 11 meeting, we will also be discussing the 1999 John Day 24-hour spill evaluation, Hevlin said. The Corps will be presenting their proposal for the test, then everyone

will have an opportunity to provide comments and questions.

The other element of the SCT's plan to approach the spill test issue, Hevlin continued, is a request to BPA to provide information on the economic, transmission and power-related concerns relating to spill decisions at John Day, The Dalles and Bonneville. BPA will be putting together a briefing, to be held some time in late February, addressing these issues, he explained. The issue at Bonneville Dam is the daytime spill level, and its relationship to adult fallback, he added. SCT has asked Ted Bjornn to come to the next SCT meeting to answer questions on this topic.

Ruff added that these studies are AFEP studies associated with the Columbia River Fish Mitigation program; it is the SCT's responsibility to prioritize funding for both capital improvements at the dams and CRFM-related research projects. The TMT is also involved, because of their responsibility to coordinate in-season operations. What we need to focus in on is, what study protocols do we need at The Dalles and John Day to get a handle on the 30% vs. 64% spill question, given the concerns that have been raised about this study design? Ruff said. We need to highlight and resolve those concerns. Primarily, this is a heads-up for the IT he said, because, in all likelihood, you will be asked to discuss this issue at your next meeting.

IV. PATH.

a. Report of the IT/PATH Subgroup. Brown reported that a subgroup of IT and PATH participants have been discussing priorities for PATH's 1999 analytical work; the most recent meeting of this group took place in Seattle in January, and its next meeting is scheduled for February 25 in Portland.

Four main issues were discussed at the January meeting, Brown explained; the first was decision-making in PATH, and how PATH brings issues to the IT. PATH uses a similar, but not identical, issue-raising process to that used by the Regional Forum committees; there was some discussion about how the IT's role in resolving some of the issues PATH faces, particularly in the latter stages of its analyses, could be clarified. The second item discussed was the February 25 meeting, which was an outgrowth of a discussion with the Power Planning Council on December 16, Brown said. At that meeting, Dave Marmorek briefed the Council on the contents of the 1998 PATH report; the question of when interested parties might have an opportunity to ask technical questions of PATH arose. It was agreed to schedule the February 25 meeting to allow interested parties to raise technical questions and issues related to the analysis of options in the PATH report; these questions and issues are to be submitted in advance of the meeting to John Palensky. The agenda for the meeting will be driven by these questions and issues, Brown said.

In terms of developing PATH's priorities for analysis in 1999, said Brown, we're not much further along than we were when we reported to you in December. There is consensus that the most pressing immediate priority for PATH is to refine its fall chinook analysis, to get it up to a level comparable to its spring chinook analysis; it has also been agreed that preparation for the February 25 question and answer session is a high priority. At the January meeting, we also discussed the review of the Anadromous Fish Appendix that NMFS is now working on, he added.

Items that have not yet been resolved include experimental management and additional sensitivity analyses on spring and summer chinook, Brown continued. In all likelihood, the priority assigned to these activities will be driven by the questions and issues raised at the February 25 meeting.

The fourth item discussed at the IT/PATH January meeting was Idaho's request that some of the PATH alternatives be analyzed using an alternative flow augmentation regime, said Brown; the Idaho request will be the subject of further discussion later in today's meeting agenda.

b. Progress Report on Mid-Columbia Scoping for PATH. Hevlin reported on progress toward the development of the Quantitative Analytical Report (QAR) for listed Upper Columbia steelhead and spring chinook. The process is being undertaken by the Mid-Columbia Quantitative Analysis Work Group, which consists of representatives from the Mid-Columbia Coordinating Committee and PATH, including representatives from the Mid-Columbia PUDs, plus federal, state and tribal entities. The work group's objective is to develop a scoping document outlining a range of options to develop the QAR itself, Hevlin said. At the IT's request, the group intends to finalize this scoping document some time in March.

Basically, the scoping document will recommend how the analysis should be done, and what tools may be appropriate, Hevlin explained. The data produced by the analysis will be used to inform future NMFS Biological Opinions on Upper Columbia spring chinook and steelhead, and will help answer questions about the biological requirements of these species, and about the effects of proposed long-term actions at the federal and PUD projects.

Hevlin said that, at the first meeting of this group, it was decided that participation from a broad array of regional entities will be needed to bring this project to a successful conclusion. The absence of representatives from the Corps, Reclamation or BPA at the first meeting of this group in January was problematic; Hevlin said he has since contacted these agencies directly, and
asked them to provide a representative at the next meeting of the work group. He added that, at its first meeting, the group had developed lists of the elements needed for the scoping study, and of tasks necessary to complete the study. The next meeting of the Mid-Columbia Quantitative Analysis Work Group, which had been scheduled for February 9, has been postponed until the first week in March; that means the delivery of the scoping document to the IT will slip from March into April, Hevlin said. In response to a request, he distributed copies of the notes from the January 12 MCQAWG meeting (Enc. E).

In response to a question from Doug Arndt, Hevlin said the group has not yet finalized the geographic scope of this effort, but added that, in his opinion, that scope will include Grand Coulee to below Bonneville Dam. We will discuss that further at the next meeting of the work group, he added. Will it include the Snake River? Keith Kutchins asked. The effects of Snake River operations on these listed species will have to be included in our Biological Opinion, Hevlin replied, but I'm not sure how much we'll talk about that in this analysis. The analysis will probably include some consideration of management of Snake River water, Brown added, but it won't really involve Snake River fish.

One observation, said Kutchins – we need to look comprehensively at the entire

Columbia Basin, such that the full range of PATH analysis is included and we look not only at the impacts of Snake River water on Upper, Middle and Lower Columbia stocks, but also the impacts of the management of Upper and Lower Columbia water on Snake River management options. Good point, Brown replied. Silverberg added that the work group did discuss the need to have consistency between the format of the QAR process with the work PATH has already done, so that, eventually, the two can be merged together.

V. ISAB Reports on Analysis of Adult Passage Improvements and Comparison of Recent Scientific Reviews of Columbia Basin Restoration.

Chip McConnaha of the Council staff led this discussion, the purpose of which was to present two just-released Independent Scientific Advisory Board reports: "Looking for Common Ground: Comparison of Recent Reports Pertaining to Salmon Recovery in the Columbia River Basin," and "Review of the U.S. Army Corps of Engineers Capital Construction Program – Adult
Passage." These reports are attached as Enclosures H and I; please refer to these documents for details of the ISAB's findings.

To briefly summarize, said McConnaha, "Looking for Common Ground" is a self-initiated project which the ISAB has worked on, as time as allowed, over the past year or so. When "Return to the River" was published, he explained, the ISAB was asked frequently how that report compared to "Upstream;" the group started trying to sketch out some of the areas of commonality and disagreement between the two reports. The ISAB then took that a step further and made the same sort of comparison, on a number of major issues, between "Return to the River," "Upstream," the Forest Service/BLM "Assessment of Ecosystem Components in the Interior Columbia Basin and Draft Environmental Impact Statement," CRITFC's "Wy-Kan-Ush-Mi Wa-Kish-Kit, Spirit of the Salmon," and NMFS' "Proposed Recovery Plan for Snake River Salmon."

The ISAB is well aware that each of these five reports has a very different mission, McConnaha said, and that, to a certain extent, they would be comparing apples and oranges. Nevertheless, the group thought it would be worthwhile to examine these five reports for areas of consensus, and lack of consensus, on a number of important issues:

The conceptual foundation of each report – what scientific perspective each report brought to bear, and how it organized the available scientific information.
Natural variation, climate change and ocean productivity – how did each report deal with these uncertainties?
Habitat
Artificial propagation
Hydroelectric development and operations
Flow augmentation
Transportation
Drawdown of some mainstem Columbia and Snake River reservoirs to natural river levels or spillway crest
Structural and operational improvements at mainstem dams
Harvest
Institutions

Monitoring and evaluation

McConnaha asked the other IT participants to look at the report itself (Enclosure H) for a characterization of the specific areas of consensus and lack of consensus among the five reports on each of these issues. In general, he said, no one will be all that surprised at the areas of agreement and disagreement; there is a fair amount of distance between the conclusions in many of the reports regarding artificial production, with the tribal plan taking a fairly aggressive approach to supplementation, the "Return to the River" and "Upstream" taking a tack that was fairly far away from that, and the NMFS recovery plan falling somewhere in between. The other area in which we saw a wide array of viewpoints was mainstem passage, McConnaha said.

I think one of the main reasons this report is valuable, he continued, is summed up in the title: "Looking for Common Ground." This is an attempt to show that there are major areas and issues on which the opinions of the scientific community converge, he said, although there are also some issues on which substantial disagreement remains. This is a work in progress, he added, in the sense that the ISAB welcomes feedback on this report. It is somewhat dangerous to try to characterize what someone else thinks, particularly when you try to say that this group agrees with what another group is saying. The ISAB is particularly interested in knowing whether or not they have characterized these various viewpoints correctly, McConnaha said; he asked that any comments be submitted to him or to Mike Schiewe.

Ultimately, what the ISAB would like to do with this exercise is generate a formal synthesis report of the state of the science on some of these big issues, McConnaha explained. This report-in-progress is basically the data collection stage of that process. In response to a question from Mary Lou Soscia, McConnaha said he thinks this report could potentially be useful to both the Framework Process and the ISRP.

The second report I wanted to talk about today is part of the ISAB's ongoing review of the Corps capital budget, McConnaha said, which was mandated by Congress. Obviously, he said, this is a huge job; it isn't easy to avoid being sucked into a vortex of minutiae. To make the job more manageable, the ISAB has split this task into number of pieces; the adult passage report is the latest piece of the ISAB's review, following the pieces on mainstem passage measures and on surface bypass and dissolved gas. McConnaha added that this is the last of the technical reviews that will be produced in this process; a fourth ISAB report, the overview and synthesis of
all of the information produced in the review process so far, will be presented to the Council at its meeting at the end of February.

McConnaha again suggested that the IT membership consult the adult passage report itself (Enclosure I) for details of the ISAB's comments; the report includes the following conclusions:

> "Correction or prevention of problems with adult passage deserve more attention than they have received. Many questions remain about the effects of delay or extra energy expenditure en route upstream on the ultimate ability of adults to spawn successfully. There is currently no research program of which we are aware that is designed to satisfactorily answer this question. The question of whether the proposed measures in the Corps' capital construction budget represent a sufficient set must be viewed in a larger

context than simply a project-by-project review of desirable modification of ladders and their associated facilities at mainstem and Snake River dams. The larger perspective would address questions about whether those specific measures succeed in allowing an adequate number of adult salmon and steelhead to reach their spawning grounds in a physical condition required for successful spawning.

Measures to improve passage for adult salmon should bring the cumulative conditions for passage closer to what was probably experienced in the evolutionary history of the fish, i.e. examining what the normative condition might be. While the design of facilities for upstream passage of adult salmon has by necessity considered the adaptation of adults to upstream movement, it is apparent that there is still much to be learned, as reflected in the continuing modifications of fishways, which involve capital construction costs. Innovative measures, such as inducing upstream attraction flows in dam forebays or providing cooler water taken from lower strata, may be possible for some dam sites. Minimizing the delay and expenditure of energy by adult salmon are important passage criteria. Uninterrupted provision of passage at each individual fishway is important to smooth transit of adults upstream."

Jim Ruff provided a brief overview of the contents of this report, as well as what was said when this report was presented to the Council at yesterday's meeting. He said the ISAB makes the point that each returning adult is extremely valuable; it is the equivalent of several hundred juvenile outmigrants, and in addition, it is ready to spawn. Another important question the ISAB attempts to answer is whether or not the proposed measures for improvements in adult passage represent a complete list of necessary and desirable measures; the ISAB's conclusion is, probably
not, Ruff said.

One of the key uncertainties of the entire recovery effort is what kind of shape these adults are in once they ascend the hydropower system and approach their spawning grounds, he continued; the ISAB recommends that more research is needed to get a handle on that uncertainty, because that is one of the keys to the entire recovery and rebuilding effort. There is now a thermograph tag, which can be placed on adult salmon to record the thermal history each fish experiences on its upstream migration; another type of tag that has been proposed for funding through the Direct Program would look not only at environmental factors, such as temperature, but can also evaluate the stress each fish experiences as it moves through the system. That could be extremely useful in identifying which ladders and facilities cause stress in adult migrants, Ruff said.

Will the Council be seeking comment on this report? Arndt asked. Yes, Ruff replied – at yesterday's meeting, the Council agreed to release this report for a 30-day public review. However, as has been the case with the previous ISAB reports, this is intended more as an opportunity for interested parties to provide input to the Council recommendations that will come
out of this report, rather than an opportunity to critique the contents of the report itself.

In response to another question from Arndt, Ruff said that, once the ISAB's overview report is submitted, the Council will be preparing an "issue memo" outlining its

recommendations on the Columbia River Fish Mitigation Program. This memo will also be sent out for public review and comment later this month; once that process is completed, the memo, and the ISAB reports, will be sent to Congress by the end of April. The memo and the ISAB reports will be discussed at every Council work session and meeting between now and April 30, he added; these meetings will provide additional opportunities for input to the Council's recommendations. The ISAB has also been invited to attend an upcoming SCT meeting to provide a briefing and answer questions about its reviews.

VI. Flow Reviews.

a. Evaluation of Snake River Flow Alternatives for the '99 Decision. At an IT meeting last year, we discussed the alternatives that would be modeled by PATH, Yost said; Idaho's request was that, if the PATH analysis was to include the biological modeling of an additional 1 MAF, that PATH also model an alternative with zero flow augmentation. That was Idaho's position a year ago, Yost said -- we assumed that the additional 1 MAF alternative would be modeled, and we would like to know now whether or not that alternative is going to be modeled.

Yost said the Idaho administration has now changed slightly; Idaho's position today is that we would like to see the biological benefits of the 427 KAF of flow augmentation explained. For that reason, he said, it probably will be necessary to model the zero flow augmentation option.

In addition, said Yost, Idaho is wondering exactly what characteristics of the 427 KAF are of benefit to fish. Is it the increased velocity provided by the 427 KAF, the temperature of the Snake River water, the excellent nutrient loading it contains, or is it just coincidence? That frames the question, he said, and Idaho is looking to this group to provide some assistance in determining what options may exist to answer those questions.

Doug Arndt said it was his understanding that PATH has run a basic analysis of the additional 1 MAF option, but that this analysis was not as detailed as PATH's analysis of the other options. That's correct, said Brown – they have not run the additional 1 MAF through the full model, but they have done a surrogate analysis, and concluded that it is not worth doing a more detailed model run. As I recall, the benefits fell somewhere between those for Alternatives A1 and A2, Michael Newsom added.

Two observations, said Brown: first, the surrogate study was done just on spring fish; second, it was done only on the alternative that left all of the fish in-river, with the eight dams still in place. What the analysis didn't do is get to what I think Jim is trying to get to, in looking at alternatives such as A1 or A2 – the status quo or maximum transportation, and what might be the difference in the results if you dropped the 427 KAF out of the equation. It also didn't answer the question of those alternatives that leave the dams in, and come close and don't quite make it, said Brown – would additional flow augmentation push some of those alternatives over the top?

Keith Kutchins said he has been hearing considerable paranoia from residents in the Middle and Upper Snake that, even if the four Lower Snake Dams are breached and the river is

returned to a natural level, no assurances have been received from NMFS that flow augmentation would no longer be needed. In other words, there is a lot of fear being expressed that breaching the four Lower Snake dams will require an additional 1 MAF in flow augmentation from the Middle and Upper Snake, Kutchins said. He provided copies of a letter from Keith Tinno, Chairman of the Fort Hall Business Council of the Shoshone-Bannock Tribes, expressing the Tribes' concern about the claims, by some Idaho officials and water users, that restoring the Snake River to natural river levels will require additional water from the Middle and Upper Snake for salmon flow augmentation (Enclosure F).

It sounds to me as though there are two separate concerns here, said Arndt – first, at some point, it was recommended that PATH analyze the effect of an additional 1 MAF of flow augmentation on one or more of the options under analysis, and that, if that analysis was done, that we also look at the effects of zero flow augmentation. We now have a limited PATH analysis of the 1 MAF option, for a couple of the alternatives; the question there, it seems to me, is whether it has now been analyzed thoroughly enough that we can remove it from further consideration, as the preliminary analysis seems to indicate, Arndt said. We should get that question nailed down, he said, so that it doesn't jump up and bite us later.

The other issue we should discuss, he continued, is whether any flow augmentation will be needed under a drawdown scenario. That's the question Keith is asking, said Brown, but I don't think that's the question Jim is asking.

What Idaho is requesting, specifically, said Yost, is that the status quo and/or enhanced transportation options be modeled or analyzed with zero flow augmentation, so that we can demonstrate to everyone what the biological benefits of the 427 KAF in Snake River flow augmentation are. That may not have to be a modeling exercise, he said; there may be other ways for you to determine what that biological benefit is.

This is the second half of the issue we took up in October, when Darryl Olsen and Steve Smith gave us a presentation on some of the new information that has been collected about the benefits of flow, Brown said. Based on that information, we decided that we didn't want to make
any changes to the flow augmentation program for the 1999 season.

What we didn't take up, however, is what we want to do about reviewing flow augmentation in the context of longer-term decisions like the 1999 decision, Brown said. I agree with Doug that, with respect to the one alternative that has been done, we should be able to close the books, he said. However, I want to be very, very clear that the alternative on which the book is closing is the in-river alternative – Alternative A6, which leaves the dams in place and eliminates in-river transportation. What PATH concluded, in its surrogate analysis, was that, if we do everything we can conceivably do to improve passage at the eight mainstem projects, and we add an additional 1 MAF of flow augmentation, it still doesn't appear to measure up even to the status quo, Brown said. However, that doesn't answer the question of the effect on the results
from, for example, the status quo alternative with 1 MAF additional flow augmentation. And that's exactly my concern, said Arndt – at the end of this process, I don't want anyone to be able to say we didn't analyze everything we should have analyzed. When I say we need to close the book on this alternative, I mean we really need to close the book, he said.

I don't want anyone to misunderstand Idaho's reason for raising this issue, Yost said. Originally, our position was, if you're going to model an additional 1 MAF from Idaho, you should also model zero flow augmentation. Given the time constraints under which PATH is operating, we don't necessarily feel that this needs to be a formal, in-depth modeling exercise, Yost said. However, I'm bringing this issue up so that no one is surprised when it comes up again later this year. Idaho has been flexible in asking the Regional Forum to help us come up with a way to provide some of the answers to Idaho's dilemma, he said.

One of the driving forces on this issue is the fact that the Idaho Legislature will not extend the Idaho legislation allowing the 427 KAF to come out of Idaho, he continued. That's not going to happen, said Yost; this is the last summer that you will be receiving the 427 KAF in flow augmentation out of Idaho. If you want anything different to happen in the summer of 2000, we have to have some explanation of the biological benefits associated with that 427 KAF Idaho contribution, as well as what the corresponding efforts are by Oregon and Washington, if the Idaho Legislature is going to be convinced, in January 2000, to revise to Idaho code to allow that 427 KAF to continue to come out of Idaho. It doesn't have to be done today, Yost said, but I'm asking for some assistance from you, because right now, there aren't very many folks in Idaho who believe there is a biological benefit associated with that 427 KAF for spring chinook or for fall chinook.

This is not dissimilar to what Montana put on the table several years ago, when they questioned the value of the flow augmentation from the Upper Columbia, Arndt observed. Montana was essentially questioning the basis for the Biological Opinion flow augmentation program, and if I understand Jim correctly, Idaho is now questioning the value of the 427 KAF.

My concern about asking PATH to undertake the analyses we've been discussing today is not with the forum or the PATH process, said Brown – my concern has to do with taking a piecemeal approach to the BiOp measures. Jim Yost suggested earlier that the biological benefit of the 427 KAF may be coincidence, and he's right, Brown said – it is coincidental with the Montana water, the Grand Coulee water, the spill program, the transportation program and the passage improvements at the mainstem projects. Frankly, he said, I'm not interested in pulling those out one at a time and asking PATH to do a 100-year life-cycle analysis. It's a package, and there are pieces of the package, such as flow, that we've learned something about in the last four or five years. We need to get a group together to assess what we've learned in the last few years, and apply it to the future, said Brown.

Actually, I would draw a sharp distinction between what Montana was looking for and what Idaho is looking for today, said Tony Nigro of ODFW. What I heard Jim Yost say is that Idaho is looking for some help from its regional co-managers in putting together a package that can be presented to the Idaho Legislature, which will shed some light on the value of Idaho's 427 KAF contribution in assuring the survival and recovery of listed stocks, Nigro said. He isn't asking for a formal, 100-year life-cycle analysis – he's asking for some discussion and explanation of how the region believes the Idaho water is benefitting these fish. The only flag I would raise is that it will be necessary for the region to reach agreement about how those benefits
are ascribed, and on the analytical approach and rigor that are applied to that analysis, and that won't be easy, Nigro said.

Sherl Chapman of the Idaho Water Users' Association said that, in his opinion, the importance of what Yost is requesting cannot be emphasized enough. The organization I represent includes nearly all of the Bureau of Reclamation contractors in Idaho; we were the people who went to the Idaho Legislature in the first place to get the statutory authority for the 427 KAF, he said. We renewed that effort in 1996, primarily to avoid confrontation and controversy. However, in order for us to continue that effort, we need some assurances that what we are doing is valuable, and has some biological benefit, Chapman said. Frankly, the irrigators I represent aren't opposed to continuing the 427 KAF contribution, as long as there is some identified benefit associated with that water, he said. However, farmers don't like to throw good money after bad, and if the water isn't doing any good, then let's try something different. There are actually two audiences that this analysis needs to address, he said, and the first group that has to be convinced is the irrigation community. If the irrigators aren't convinced, said Chapman, I can guarantee that the Legislature won't be convinced either.

The group spent a few minutes discussing what level of further analysis, both of the 1 MAF additional flow augmentation and of the question Idaho has raised about the biological benefits associated with the 427 KAF, may be appropriate, and which entity should undertake it. Ultimately, it was suggested that it should be possible to model the effects of zero flow augmentation, 427 KAF flow augmentation and 1.427 MAF flow augmentation on the various alternatives being studied by PATH; Ruff suggested further that this would be an appropriate subject for discussion at the March 3 PATH/IT meeting. He added that it would be a good idea to ask some of the fish managers to attend, to address the operational issue of when the water should be delivered – the PATH folks may or may not have a good idea of what months the flow augmentation water should be applied, he said.

Yost requested assistance from the IT and salmon managers in framing this issue for the IT/PATH discussion. It was agreed that Wagner, Newsom and Ruff will work with Yost to flesh out his presentation for that meeting. Jim Nielsen suggested further that it would be appropriate for the Fish Passage Advisory Committee to discuss this issue, and to provide Yost with their input.

Brown observed that it may be possible for the workgroup -- Yost, Wagner, Newsom, Ruff and FPAC -- to answer the question of what further analysis is needed to provide the information Idaho requires. If they need PATH to answer it, then it should go to the PATH/IT meeting as a question of PATH priority, Brown said. We could also ask the PATH/IT group to review what the workgroup comes up with, and to provide expert advice on how it may be improved, suggested Nigro. That's fine with me, said Brown – let's see what comes out of the workgroup discussion.

Kutchins asked whether this would be an appropriate time for the IT to consider actions in response to the Sho-Ban letter of February 2 (Enc. F). I would suggest that if we can frame this issue as we've discussed, that will go a long way toward answering the questions raised in this letter, said Arndt. I would suggest that our concern is somewhat more immediate, said Kutchins – it deals with the Lower Snake River Juvenile Salmon Migration Feasibility Study and the 1999 decision. I share your concern about the timing, Arndt replied; my understanding is that the general concept to be fleshed out by the workgroup is how to assess the biological benefits associated with the three levels of flow augmentation. Certainly there is a need to have

that information considered in the Feasibility Study, as well as to meet the Idaho Legislature's information needs. Procedurally, however, I think the Sho-Bans' concern can be answered through the process we've been discussing, which will need to be concluded within the next month, Arndt said. Kutchins said he would also like to participate in the workgroup; it was so agreed.

b. Reservoir Operations to Meet Lower Granite Flow Targets. Michael Newsom of Reclamation distributed a memo, "Reservoir Operations to Meet Lower granite Flow Targets – Spring vs. Summer" (attached as Enclosure G). Jim Ruff explained this, generally, is how we're currently modeling the 427 KAF in Idaho flow augmentation water, as well as the 1.427 MAF option. Newsom clarified that this analysis looks at Brownlee inflows over a 61-year period; it does not include the augmentation that comes out of Brownlee, an additional 120 KAF. He added that the 427 KAF was provided through real-time operations in the Upper Snake and at Brownlee from 1993 through the present; however, this is a modeling process, that includes at least three extended drop sequences, which does have an effect on delivery.

After a brief discussion, Newsom suggested that any questions the other IT participants may have about this modeling exercise could most efficiently be addressed through the workgroup identified in the previous agenda item; further discussion of this item, if needed, was deferred until the March IT meeting.

VII. A-Fish Appendix Status Report.

NMFS' Lynn Krasnow reported that, as most people are aware, the A-Fish Appendix delivery date, originally January 1999, has slipped – it now looks as though the Appendix will be delivered to the Corps at the end of March. It was necessary to condense the draft Appendix down from its original 140+ pages, and to put it into a more readable format, Krasnow explained. We are also working to review and incorporate all of the information PATH has developed, as well as the most recent data from the reach survival and transport studies and from other research called for in the 1995 Biological Opinion. The bottom line, Krasnow said, is that, in the Appendix, we're trying to lay out very clearly what we know, what we don't know, and what magnitude of risk is inherent if we make a decision in the face of those uncertainties.

The group spent a few minutes discussing the interaction between the A-Fish Appendix and the PATH process; specifically, Krasnow's statement that the A-Fish Appendix will take a detailed look at some information that is not being explicitly considered in the PATH process. Nigro said that, based on what he has heard, it probably isn't fair to say that much of this "new" information is not being considered by PATH, simply because it isn't referenced in PATH's 1998 report. Brown replied that Tom Cooney, Rick Williams, Chris Toole, Steve Smith and Krasnow, all of NMFS, have been participating directly in the PATH process, some since Day 1. We certainly are not limited, in our understanding of the PATH analysis, to that which we can glean from the 1998 report, he said. I don't want to imply that there is some vast store of new information that NMFS has kept hidden until now, Brown said; I would simply suggest that you wait to see what we come up with in the Appendix.

Obviously there is some nervousness in the region about what the A-Fish Appendix is going to say, said Silverberg; however, until we are actually able to review that document, there isn't much point in talking about it extensively. She observed that a process has been set up to

allow both PATH and other interested parties in the region to review and comment on the A-Fish Appendix, and suggested that further discussion be postponed until the document is released for comment.

When will we have an opportunity to review the Appendix, and, more importantly, how will this slippage in schedule affect the schedule for the release of the draft EIS and, ultimately, for the 1999 decision? Ruff asked. The draft Appendix will be submitted to the Corps and PATH at the end of March, Krasnow replied, although we may give PATH some particular information to review prior to that date. At that time, for all intents and purposes, it is a public document. In terms of how the slippage in schedule affects the schedule for the release of the draft EIS, said Arndt, even when the delivery date for the Appendix was January 15, 1999, and we thought we could release the draft EIS in May, the Corps didn't feel it was going to be able to meet the December 1999 deadline. Now we have a slippage of two and a half months, said Arndt, and it's probably fair to say that it will be mid-August, at least, before the draft EIS will be ready for release – it isn't going to be feasible to compress the analysis that will follow the delivery of the A-Fish Appendix to compensate for the slippage, Arndt said. The final decision will slip to some time in early 2000, at the earliest, he added.

Ruff said that, this being the case, it probably would be advisable for the Corps to make it clear to the region that the 1999 decision will not be made until early in 2000. I think that's an excellent suggestion, said Arndt.

VIII. Implementation Team Business.

a. Report on December 1998 "Chairs" Meeting. Silverberg distributed a set of notes from the December 18 meeting of the Columbia River Forum Team Chairs (Enclosure J). The goal of this meeting, which included participation by IT Chair Brian Brown, TMT Chair Cindy Henriksen, DGT co-Chairs Mark Schneider and Gustavo Bisbal and SCT co-Chairs Bill Hevlin and Jim Ruff, was to discuss both facilitation and improved coordination between the Regional Forum teams. Silverberg asked the other IT participants to review these notes at their leisure.

b. Participation. Silverberg said she is interested in the views of the other IT participants in terms of their overall satisfaction with the IT process. She said she has asked Cathryn Collis to contact IT participants individually to solicit their feedback about how the IT and Regional Forum processes might be improved. The group spent a few minutes discussing potential interactions between the Regional Forum committees and the soon-to-be-operational Columbia Basin Forum; Arndt made the point that the Columbia Basin Forum presents an opportunity to bring Montana, various Tribes and other entities which have opted out of the Regional Forum process back into active participation in regional decisionmaking; it would certainly be worthwhile to have some further discussion, at the IT level, of how we want to connect efficiently with the Columbia Basin Forum process, he said.

Silverberg added that she had distributed a questionnaire to the TMT membership, asking about their level of satisfaction with both the facilitation services she and her colleagues are rendering, and with the TMT process itself. She said she will be distributing a similar questionnaire to participants in the other Regional Forum committees soon.

c. Facilitation. John Palensky was not able to attend today's meeting to discuss the

status of the facilitation contract, Silverberg said; we'll put this on the agenda for the next IT meeting. At the chairs meeting, there was general agreement that facilitation has been useful for all of the Regional Forum committees, and that facilitation should continue, Brown added.

d. Committee Structure. Brown said the important points regarding committee structure – on the merging of the Dissolved Gas and Water Temperature Teams, on the connection between the Regional Forum committees and the Columbia Basin Forum, and on the interactions between PATH and the IT – were made during previous agenda items.

IX. Multi-Species Framework Update.

McConnaha reported that the Framework Process participants are in the process of trying to identify the range of regional thinking about future alternatives for the Snake/Columbia systems. Some 27 concept papers were received from interested parties in the region; these 27 individual visions are being condensed down to six or eight alternatives, which are intended to represent the full range of potential futures for the system. This differs from the traditional approach in that, rather than focusing on specific, individual actions at specific, individual projects, it asks people to think about what they're really trying to accomplish over the long term, and what kind of a river system they want to see in place in the future, McConnaha explained.

Roy Sampsel has been talking directly to everyone who submitted a concept paper to bring them up to speed on the Framework process, and to ensure that their vision for the system is reflected in at least one of the six or eight alternatives for analysis, McConnaha continued. A meeting has been set for February 8, at which we will try to reach closure on this first step, he said, so that the Ecological Workgroup can begin the actual analysis of the train of logic associated with each alternative. Initially, they will be looking critically at those trains of logic, to ensure that the system each describes is consistent with the vision it propounds, and that the strategies each proposes will actually move the system in the desired direction.

The ultimate goal is to develop a set of alternatives that are internally consistent, and address both ecological effects and human impacts, which the region can work with, McConnaha explained. The idea isn't to judge whether any of these alternatives is right or wrong, he said – it is to work collaboratively with the various parties to develop the best alternatives we can, in the sense that the strategies they propose really will change the system to make their vision a reality.

In response to a question, McConnaha said the Framework effort is not intended to replace PATH – it is intended as a context into which PATH can be put, a template that will help assess a given strategy's likelihood of changing the system in a desired future direction. He said he will provide further updates on the Framework process at future IT meetings.

X. Approval of Minutes from December 10 IT Meeting.

The minutes were approved with one minor change.

XI. Next IT Meeting Date and Agenda Items.

The next meeting of the Implementation Team was set for Thursday, March 4, from 9 a.m. to 4 p.m. at NMFS' Portland offices. Meeting notes prepared by Jeff Kuechle, BPA

contractor.